

IN THE CLAIMS:

Please cancel claims 1 and 13-15 without prejudice.

In accordance with the Revised Rules under 37 C.F.R. 1.121, please amend the claims as shown below and indicated as "currently amended." Also shown below are claims that may be original, cancelled, withdrawn, previously presented, new, and not entered.

1. (cancelled)

2. (currently amended) A method for manufacturing an optical cable ~~according to claim 1, comprising:~~

preparing a metal tube in which an optical fiber is received;
transferring the metal tube in a longitudinal direction thereof at a predetermined speed; and
bending the metal tube so that the transferred metal tube forms a waved shape in an advancing direction thereof,

wherein the bending step includes:

passing the metal tube between a first pair of rollers which are oppositely rotating and arranged in a direction perpendicular to an advancing direction of the metal tube, and
wherein, bending the metal tube to form a waved shape in the advancing direction thereof by shaking trajectories as the pair of rollers are rotating, a trajectory drawn by opposite points on the first pair of rollers, is shaken in a direction perpendicular to the advancing direction of the metal tube so that the metal tube is bent to form a waved shape in the advancing direction as the first pair of rollers are rotating.

3. (currently amended) A method for manufacturing an optical cable according to claim 1 2,

wherein the bending step includes bending the metal tube in the advancing direction thereof by passing the metal tube, having passed through the through a first pair of rollers, which are oppositely rotated, and through a second pair of rollers which are spaced apart from the first pair of rollers along the advancing direction and oppositely rotated arranged in a direction perpendicular to the advancing direction of the metal tube,

wherein trajectories drawn by opposite points of the ~~first and second~~ pairs of rollers are periodically shaken in a direction perpendicular to the advancing direction as the ~~first and second~~ pairs of rollers rotate ~~so that the metal tube is bent in the advancing direction, and~~

wherein the first and second pairs of rollers have the same shaking period and are arranged to have a phase difference as much as a half period so that the first pair of rollers and the second pair of rollers are shaken to opposite directions.

4. (currently amended) A method for manufacturing an optical cable according to claim ~~1~~ 2, further comprising the step of forming a sheath surrounding the metal tube which has been bent to form a waved shape in the bending step.

5. (original) A method for manufacturing an optical cable according to claim 4, wherein the sheath has an appearance formed straightly along the longitudinal direction of the metal tube.

6. (original) A method for manufacturing an optical cable according to claim 4, wherein the sheath has an appearance bent in a waved shape according to the shape of the metal tube.

7. (currently amended) An apparatus for manufacturing an optical cable, comprising: a first pair of rollers which are rotated oppositely so that a metal tube receiving an optical fiber therein is passed through the rollers in a longitudinal direction thereof,

wherein, as the first pair of rollers are arranged in a direction perpendicular to a length direction of the metal tube, and as the first pair of rollers are rotated, a trajectory-trajectories drawn by opposite points on the first pair of rollers ~~is~~ are shaken in a direction perpendicular to an advancing direction of the metal tube so that the metal tube passing through the first pair of rollers is bent to form a waved shape in the advancing direction.

8. (currently amended) An apparatus for manufacturing an optical cable according to claim 7, further comprising a second pair of rollers spaced apart from the first pair of rollers along the advancing direction of the metal tube so that the metal tube passing through the first pair of rollers is passed through the second pair of rollers which are rotated oppositely,

wherein, as the second pair of rollers are arranged in a direction perpendicular to a length direction of the metal tube, and as the first pair of rollers are rotated, a trajectory-trajectories drawn

by opposite points on the second pair of rollers ~~is~~are periodically shaken in a direction perpendicular to the advancing direction of the metal tube, and

wherein the second pair of rollers are arranged to have the same shaking period as the first pair of rollers and have a phase difference as much as a half period to the first pair of rollers so that the second pair of rollers is shaken in a direction opposite to the first pair of rollers.

9. (original) An apparatus for manufacturing an optical cable according to claim 7, wherein the first pair of rollers are a pair of eccentric cams.

10. (original) An apparatus for manufacturing an optical cable according to claim 7, wherein the first pair of rollers are rollers having toothed or star-like sections, engaged to each other.

11. (currently amended) An apparatus for manufacturing an optical cable according to claim 7,

wherein ~~the~~ at least one of the first pair of rollers is an eccentric cam having a circular, oval or fan-shaped section, and the first pair of rollers are elastically biased oppositely with the use of an elastic means.

12. (original) An apparatus for manufacturing an optical cable according to claim 7, wherein at least one of the first pair of rollers is a roller having a polygonal section, and the first pair of rollers are elastically biased oppositely with the use of an elastic means.

Claims 13-15. (cancelled)